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EXAMINER

OMGBA, ESSAMA

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,506

Applicant(s)

MCLEOD ET AL.

Examiner

Essama Omgba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (US Patent 6,493,920) in view of Miyazaki et al. (US Patent 4,883,310), Wandiez (US Patent 6,409,947), Johnston (US Patent 4,712,287) and Bhat et al. (US Patent 6,133,398).

With regards to claims 1 and 5, Hill et al. discloses a method of assembling a roof module 14 to an automotive vehicle, the method comprising providing the roof module 14 wherein the roof module includes a roof portion 60 having at least one edge, a transparent panel 62 having a bottom edge adapted for attachment to a body of the automotive vehicle during assembly of the automotive vehicle, and a top edge that is secured to the roof portion adjacent the at least one edge of the roof portion wherein the transparent panel is a windshield, and assembling the roof module to a body portion of the automotive vehicle, see column 2, lines 43-62. Hill et al. does not disclose the top edge of the windshield being adhesively secured to the roof portion adjacent the forward edge of the roof portion and the roof portion including a roof panel with a foam-in-place headliner. However it is known to adhesively secure a windshield to an edge of a roof portion as attested by Miyazaki et al., see column 4, lines 45-48. Therefore it would

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have been obvious to one of ordinary skill in the art at the time the invention was made to have adhesively secured the top edge of the windshield to the roof portion in the method of Hill et al., in light of the teachings of Miyazaki et al., in order to impart additional structural integrity to the automobile body. Furthermore it is known to use foam-in-place headliners as attested by Wandiez, see column 5, lines 62-67 and column 6, lines 1-55. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a roof portion including a roof panel and a foam-in-place headliner to the roof module of Hill et al./Miyazaki, in light of the teachings of Wandiez, in order to reduce the amount of parts and complexity introduced to an automotive assembly plant. Applicant should note that it is known to use gaskets to encapsulate the peripheral edge of a windshield in order to provide a seal against the intrusion of fluids between the windshield and the frame of the vehicle in which it is installed as attested by Johnston, see column 5, lines 12-16. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have included an encapsulation covering with the windshield of Hill et al./Miyazaki et al./Wandiez, in light of the teachings of Johnston, in order to provide a seal against the intrusion of between the windshield and the frame of the vehicle in which it is installed. Although Hill/Miyazaki et al./Wandiez/Johnston does not disclose the bottom end of the windshield being connected to the body using an adhesive having an elongation that is greater than about 300 percent, however it is known to use adhesives having an elongation that is greater than about 300 percent in bonding an automobile windshield to the windshield frame as attested by Bhat et al., see column 1,

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lines 14-21, column 14, lines 62-67 and column 15, lines 1-10. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an adhesive having an elongation that is greater than about 300 percent in the method of Hill et al./Miyazaki et al./Wandiez/Johnston, in light of the teachings of Bhat et al., in order to shorten production time.

For claim 3, see column 2, line 18 of Hill et al. and column 4, lines 45-48 of Miyazaki et al.

For claim 4, see column 2, lines 58-62 of Hill et al.

For claim 8, see column 1, lines 17-22 of Bhat et al.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. in view of Miyazaki et al., Johnston and Bhat et al.

Hill et al. discloses a method of assembling a roof module 14 to an automotive vehicle, the method comprising providing the roof module 14 wherein the roof module includes a roof portion 60 having at least one edge, a transparent panel 62 having a bottom edge adapted for attachment to a body of the automotive vehicle during assembly of the automotive vehicle, and a top edge that is secured to the roof portion adjacent the at least one edge of the roof portion wherein the transparent panel is a windshield, and assembling the roof module to a body portion of the automotive vehicle, see column 2, lines 43-62. Hill et al. does not disclose the top edge of the windshield being adhesively secured to the roof portion adjacent the forward edge of the roof portion and the windshield including an encapsulation covering at least a portion of one of the edges of the windshield. However it is known to adhesively secure a windshield to

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and edge of a roof portion as attested by Miyazaki et al., see column 4, lines 45-48.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adhesively secured the top edge of the windshield to the roof portion in the method of Hill et al., in light of the teachings of Miyazaki et al., in order to impart additional structural integrity to the automobile body. Furthermore it is known to use gaskets to encapsulate the peripheral edge of a windshield in order to provide a seal against the intrusion of fluids between the windshield and the frame of the vehicle in which it is installed as attested by Johnston, see column 5, lines 12-16.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have included an encapsulation covering with the windshield of Hill et al./Miyazaki et al., in light of the teachings of Johnston, in order to provide a seal against the intrusion of between the windshield and the frame of the vehicle in which it is installed. Although Hill/Miyazaki et al./Johnston does not disclose the bottom end of the windshield being connected to the body using an adhesive having an elongation that is greater than about 300 percent, however it is known to use adhesives having an elongation that is greater than about 300 percent in bonding an automobile windshield to the windshield frame as attested by Bhat et al., see column 1, lines 14-21, column 14, lines 62-67 and column 15, lines 1-10. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an adhesive having an elongation that is greater than about 300 percent in the method of Hill et al./Miyazaki et al./Johnston, in light of the teachings of Bhat et al., in order to shorten production time.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al./Miyazaki et al./Wandiez/Johnston/Bhat et al. as applied to claim 1 above, and further in view of Meritor Automotive (February 2000).

Hill et al./Miyazaki et al./Wandiez/Johnston/Bhat et al. discloses a method of assembling a roof module to an automotive vehicle as shown above except for the roof portion including at least one vehicle impact counter measure. However Meritor Automotive teaches head area air bags as integrated components of a roof module, see page titled "Integrated components". Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the roof portion of Hill et al./Miyazaki et al./Wandiez/Johnston/Bhat et al. with head area air bags, in light of the teachings of Meritor Automotive, for increased protection of the vehicle's occupants.

5. Claims 9, 10, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. in view of Miyazaki et al. and Hsieh (US Patent 5,115,086).

With regards to claims 9, 13 and 16, Hill et al. discloses a method of assembling a roof module 14 to an automotive vehicle, the method comprising providing the roof module 14 wherein the roof module includes a roof portion 60 having a forward edge, a rearward edge, a pair of side edges and a pair of A-pillars 52 extending adjacent opposing corners of the roof portion, and a windshield 62 having a top edge, a bottom edge and a pair of side edges wherein the top edge of the wind shield is secured to the roof portion adjacent the forward edge of the roof portion and the side edges of the windshield are secured to the A-pillars, the bottom edge is configured for attachment to

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a body portion of the automotive vehicle upon assembly of the roof module to the automotive vehicle, and the A-pillars and the body portion of the vehicle include corresponding mating structures (56, 40) for assisting in assembling the roof module to the body portion of the vehicle, and assembling the roof module to the body portion of the vehicle by matingly fitting the mating structures of the A-pillars and the mating structures of the body portion and by adhesively securing the windshield to the body portion of the vehicle, see column 2, lines 18-27 and 43-67, column 3, lines 1-7 and figure 2. Hill et al. does not disclose the top edge of the windshield being adhesively secured to the roof portion adjacent the forward edge of the roof portion. However it is known to adhesively secure a windshield to an edge of a roof portion as attested by Miyazaki et al., see column 4, lines 45-48. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adhesively secured the top edge of the windshield to the roof portion in the method of Hill et al., in light of the teachings of Miyazaki et al., as is conventional in the art. Although Hill et al./Miyazaki et al. does not disclose the adhesive as being a urethane adhesive, however it is known to use a urethane adhesive in bonding a windshield to an auto body as attested by Hsieh, see column 1, lines 13-19. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a urethane adhesive in the method of Hill et al./Miyazaki et al., in view of the teachings of Hsieh, in order to impart additional structural integrity to the auto body. Although Hill et al./Miyazaki/Hsieh does not disclose connecting the roof portion of the vehicle to a pair of B-pillars and to a pair of C-pillars of the automotive vehicle body, however such

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connection of the roof module to the vehicle body is known as attested by Lumpe et al., see column 1, lines 41-54, column 2, lines 1-9 and 27-67, and column 3, lines 1-8.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have connected the roof portion of Hill et al./Miyazaki/Hsieh to a pair of B-pillars and a pair of C-pillars, in light of the teachings of Lumpe et al., in order to provide additional stiffening of the body of the vehicle.

For claim 10, see column 1, lines 21-25 of Hsieh.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. in view of Miyazaki et al., Hsieh and Derwent 2001-123380 (Derwent'380).

Hill et al. discloses a method of assembling a roof module 14 to an automotive vehicle, the method comprising providing the roof module 14 wherein the roof module includes a roof portion 60 having a forward edge, a rearward edge, a pair of side edges and a pair of A-pillars 52 extending adjacent opposing corners of the roof portion, and a windshield 62 having a top edge, a bottom edge and a pair of side edges wherein the top edge of the windshield is secured to the roof portion adjacent the forward edge of the roof portion and the side edges of the windshield are secured to the A-pillars, the bottom edge is configured for attachment to a body portion of the automotive vehicle upon assembly of the roof module to the automotive vehicle, and the A-pillars and the body portion of the vehicle include corresponding mating structures (56, 40) for assisting in assembling the roof module to the body portion of the vehicle, and assembling the roof module to the body portion of the vehicle by matingly fitting the mating structures of the A-pillars and the mating structures of the body portion and by

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adhesively securing the windshield to the body portion of the vehicle, see column 2, lines 18-27 and 43-67, column 3, lines 1-7 and figure 2. Hill et al. does not disclose the top edge of the windshield being adhesively secured to the roof portion adjacent the forward edge of the roof portion. However it is known to adhesively secure a windshield to an edge of a roof portion as attested by Miyazaki et al., see column 4, lines 45-48. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adhesively secured the top edge of the windshield to the roof portion in the method of Hill et al., in light of the teachings of Miyazaki et al., as is conventional in the art. Applicant should note that it is conventional to adhesively secure windshields to body portions of vehicle including "bottom ends" of windshields. Although Hill et al./Miyazaki et al. does not disclose the adhesive as being a urethane adhesive, however it is known to use a urethane adhesive in bonding a windshield to an auto body as attested by Hsieh, see column 1, lines 13-19. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a urethane adhesive in the method of Hill et al./Miyazaki et al., in view of the teachings of Hsieh, in order to impart additional structural integrity to the auto body. Furthermore roof portions including a roof rail assembly having structural foam disposed therein are known as attested by Derwent'380, see abstract. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided structural foam to the roof rail of the roof portion of Hill et al./Miyazaki/Hsieh, in light of the teachings of Derwent'380, in order to structurally stiffen the roof rails. Regarding the recitation of the windshield being the only transparent panel of the roof module,

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Applicant should note that having the windshield as the only transparent panel of the roof module is an obvious matter of design choice wherein no stated problem is solved or unexpected results obtained in having the windshield as the only transparent panel of the roof module versus a roof module with a plurality of transparent panels as disclosed by Hill et al. for example. Furthermore it is within the general knowledge of one of ordinary skill in the art to provide a roof module with one or more transparent panels.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al./Miyazaki et al./Hsieh as applied to claim 9 above, and further in view of Bergholz (US Patent 6,151,539).

Hill et al./Miyazaki et al./Hsieh discloses a method of assembling a roof module to an automotive vehicle as shown above except for the roof portion including at least a portion of a global positioning system. However Bergholz et al. teaches a global positioning system mounted on the roof of a vehicle, see column 6, lines 34-36.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have included a global positioning system in the roof of Hill et al./Miyazaki et al./Hsieh, in light of the teachings of Bergholz et al., in order to achieve high precision finding while driving the vehicle.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. in view of Miyazaki et al., Hsieh, Johnston and Lumpe et al. (US Patent 6,592,176).

Hill et al. discloses a method of assembling a roof module 14 to an automotive vehicle, the method comprising providing the roof module 14 wherein the roof module includes a roof portion 60 having a forward edge, a rearward edge, a pair of side edges

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and a pair of A-pillars 52 extending adjacent opposing corners of the roof portion, and a windshield 62 having a top edge, a bottom edge and a pair of side edges wherein the top edge of the wind shield is secured to the roof portion adjacent the forward edge of the roof portion and the side edges of the windshield are secured to the A-pillars, the bottom edge is configured for attachment to a body portion of the automotive vehicle upon assembly of the roof module to the automotive vehicle, and the A-pillars and the body portion of the vehicle include corresponding mating structures (56, 40) for assisting in assembling the roof module to the body portion of the vehicle, and assembling the roof module to the body portion of the vehicle by matingly fitting the mating structures of the A-pillars and the mating structures of the body portion and by adhesively securing the windshield to the body portion of the vehicle, see column 2, lines 18-27 and 43-67, column 3, lines 1-7 and figure 2. Hill et al. does not disclose the top edge of the windshield being adhesively secured to the roof portion adjacent the forward edge of the roof portion. However it is known to adhesively secure a windshield to and edge of a roof portion as attested by Miyazaki et al., see column 4, lines 45-48. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adhesively secured the top edge of the windshield to the roof portion in the method of Hill et al., in light of the teachings of Miyazaki et al., as is conventional in the art. Although Hill et al./Miyazaki et al. does not disclose the adhesive as being a urethane adhesive, however it is known to use a urethane adhesive in bonding a windshield to an auto body as attested by Hsieh, see column 1, lines 13-19. Therefore it would have been obvious to one of ordinary skill in the art at the time the

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invention was made, to have used a urethane adhesive in the method of Hill et al./Miyazaki et al., in view of the teachings of Hsieh, in order to impart additional structural integrity to the auto body. Furthermore it is known to use gaskets to encapsulate the peripheral edge of a windshield in order to provide a seal against the intrusion of between the windshield and the frame of the vehicle in which it is installed as attested by Johnston, see column 5, lines 12-16. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have included an encapsulation covering with the windshield of Hill et al./Miyazaki, in light of the teachings of Johnston, in order to provide a seal against the intrusion of between the windshield and the frame of the vehicle in which it is installed. Although Hill et al./Miyazaki/Hsieh/Johnston does not disclose connecting the roof portion of the vehicle to a pair of B-pillars and to a pair of C-pillars of the automotive vehicle body, however such connection of the roof module to the vehicle body is known as attested by Lumpe et al., see column 1, lines 41-54, column 2, lines 1-9 and 27-67, and column 3, lines 1-8. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have connected the roof portion of Hill et al./Miyazaki/Hsieh/Johnston to a pair of B-pillars and a pair of C-pillars, in light of the teachings of Lumpe et al., in order to provide additional stiffening of the body of the vehicle.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al./Miyazaki et al./Hsieh as applied to claim 9 above, and further in view of Meritor Automotive (February 2000).

Hill et al./Miyazaki et al./Hsieh discloses a method of assembling a roof module to an automotive vehicle as shown above except for the roof portion including at least one vehicle impact counter measure. However Meritor Automotive teaches head area air bags as integrated components of a roof module, see page titled "Integrated components". Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the roof portion of Hill et al./Miyazaki et al./Hsieh with head area air bags, in light of the teachings of Meritor Automotive, for increased protection of the vehicle's occupants.

10. Claims 17, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. in view of Miyazaki et al., Hsieh, Bhat et al. and Lumpe et al.

With regards to claims 17, 18 and 20, Hill et al. discloses a method of assembling a roof module 14 to an automotive vehicle, the method comprising providing the roof module 14 wherein the roof module includes a roof portion 60 having a forward edge, a rearward edge, a pair of side edges and a pair of A-pillars 52 extending adjacent opposing corners of the roof portion, and a windshield 62 having a top edge, a bottom edge and a pair of side edges wherein the top edge of the wind shield is secured to the roof portion adjacent the forward edge of the roof portion and the side edges of the windshield are secured to the A-pillars, the bottom edge is configured for attachment to a body portion of the automotive vehicle upon assembly of the roof module to the automotive vehicle, and the A-pillars and the body portion of the vehicle include corresponding mating structures (56, 40) for assisting in assembling the roof module to

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the body portion of the vehicle, and assembling the roof module to the body portion of the vehicle by matingly fitting the mating structures of the A-pillars and the mating structures of the body portion and by adhesively securing the windshield to the body portion of the vehicle, see column 2, lines 18-27 and 43-67, column 3, lines 1-7 and figure 2. Hill et al. does not disclose the top edge of the windshield being adhesively secured to the roof portion adjacent the forward edge of the roof portion. However it is known to adhesively secure a windshield to an edge of a roof portion as attested by Miyazaki et al., see column 4, lines 45-48. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adhesively secured the top edge of the windshield to the roof portion in the method of Hill et al., in light of the teachings of Miyazaki et al., as is conventional in the art. Applicant should note that it is conventional to adhesively secure windshields to body portions of vehicle including "bottom ends" of windshields. Although Hill et al./Miyazaki et al. does not disclose the adhesive as being a urethane adhesive, however it is known to use a urethane adhesive in bonding a windshield to an auto body as attested by Hsieh, see column 1, lines 13-19. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a urethane adhesive in the method of Hill et al./Miyazaki et al., in view of the teachings of Hsieh, in order to impart additional structural integrity to the auto body. Furthermore it is known to use adhesives having an elongation that is greater than about 300 percent in bonding an automobile windshield to the windshield frame as attested by Bhat et al., see column 1, lines 14-21, column 14, lines 62-67 and column 15, lines 1-10. Therefore it would have been obvious to one of

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ordinary skill in the art at the time the invention was made, to have used an adhesive having an elongation that is greater than about 300 percent in the method of Hill et al./Miyazaki et al./Hsieh, in light of the teachings of Bhat et al., in order to shorten production time. Although Hill et al./Miyazaki/Hsieh/Bhat et al. does not disclose connecting the roof portion of the vehicle to a pair of B-pillars and to a pair of C-pillars of the automotive vehicle body, however such connection of the roof module to the vehicle body is known as attested by Lumpe et al., see column 1, lines 41-54, column 2, lines 1-9 and 27-67, and column 3, lines 1-8. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have connected the roof portion of Hill et al./Miyazaki/Hsieh/Bhat et al. to a pair of B-pillars and a pair of C-pillars, in light of the teachings of Lumpe et al., in order to provide additional stiffening of the body of the vehicle.

For claim 21, Official Notice is taken in that it is known to assemble a roof module in one area and assemble it to a body portion of an automotive vehicle in another area.

Response to Arguments

11. Applicant's arguments filed May 17, 2005 have been fully considered but they are not persuasive.

In response to Applicant's argument that the motivation provided by the Office action for using an adhesive having elongation of 300% is not sufficiently specific for maintaining the asserted obviousness rejection, the examiner submits that "shortening of production time" as motivation is specific enough. It should be noted that Applicant

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admits at pages 7 and 8 of the specification that "a bonding system that includes one or more adhesives, primers or the like such as those commonly owned US Patents Nos. 5,115,086; 5,603,798; 5,792,811; 5,922,809; 5,976,305; 6,133,398" are used to attach the transparent panel to the body of the vehicle, thus the use of such adhesives is old and well known in the art. As disclosed in US Patent 5,976,305, column 12, lines 25-29, "the adhesive of the invention is formulated to provide a working time of about 6 minutes or greater more preferably about 10 minutes or greater. Preferably the working time is about 15 minutes or less and more preferably about 12b minutes or less"; therefore shortening of production time is clearly one of the advantages of using such an adhesive, this is also corroborated by Applicant's admission at page 8, lines 11 and 12 of the specification that "the bonding system is sufficient so that a relatively rapid cure is possible". The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art (the 300% elongation can accommodate greater tolerances between the roof module and the body of the vehicle during attachment, after attachment or both) cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). For exemple Lumpe et al. (US Patent 6,592,176) in column 1, lines 35-40 discloses that with "the modular roof of the present invention, the roof rails are preferably fastened on the roof module via a fastening system comprised of gluing, soldering, welding, screwing, or riveting. This has the advantage of eliminating the expense associated with designs for balancing tolerances between a roof panel and a recess within the vehicle roof". So clearly it is known in the art that the use of

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adhesives in such cases allows for greater tolerances. Furthermore accommodation of greater tolerances will also shorten production time as production would be simplified. The examiner still maintains that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a known and readily available adhesive (that is being used in the automotive industry to attach glass substrates to other substrates such as metal or plastics) to bond a transparent panel that is part of a roof module to the body of a vehicle.

In response to Applicant's argument that the use of Lumpe et al. as a reference for teaching attachment of a roof module to B and C-pillars is improper since the rejection based on Lumpe et al. and the other references fails to establish obviousness of the subject matter of at least claims 9, 17 and 18 as a whole because the roof module of Lumpe et al. does not include any pillars, nor does it include a transparent panel or a windshield, and in addition, the use of Lumpe et al. as a reference ignores multiple advantages of subject matter of claims 9, 17 and 18, the examiner once again submits that the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore Applicant's roof panel too does not include any pillars therefore the argument that the Lumpe et al. is not a proper reference because the roof module of Lumpe et al. does not include any pillars is moot. Also the use of A, b or C-pillars in automotive vehicle bodies depends on the particular model being manufactured and the examiner maintains that one of ordinary skill in the art

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would know to provide appropriate fastening structures to a roof module that is to be attached to a vehicle body with A, B or C-pillars. Applicant should note that Hill et al.'s roof module includes a transparent panel and the roof module of Hill et al. is appropriately attached to a vehicle body with a-pillars.

In view of the above remarks, the examiner maintains that a *prima facie* case of obviousness has been established in the instant application.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Essama Omgba
Primary Examiner
Art Unit 3726

eo
July 25, 2005